# **Plenary Presentation**

#### 6.2 NORDIC EXPERIENCES AFTER EARLY ASBESTOS BANS

LARS VEDSMAND

Occupational Health and Safety Officer (working with asbestos and mineral fibres since 1978)

(Below are edited notes from the PowerPoint presentation used at the Congress.)

#### Movement towards the Nordic ban

- Scientists have known of the dangers of asbestos exposure for decades.
- 1952: Insulation workers press for autopsies on dead colleagues. Regular examinations for insulators established.
- 1954: Asbestosis recognised.
- 1950s: Asbestos and mineral wool often discussed in Nordic trade union conferences.
- 1972: A ban on the use of asbestos in insulation materials came after threats of a boycott from the insulators' union.
- Some enterprises found to be concealing the use of "banned" asbestos technology.
- 1986: Danish Supreme Court convicts the manufacturer "Eternit" as responsible for reported diseases stating that, even if there was not a total ban, they should have been aware of dangers for 50 years and thus should have taken action to prevent disease.
- Late 80s: Ban of asbestos in the Nordic countries and Germany.
- Many difficulties (technical) remain including disputes about final dates for banning different products.

#### Post-ban developments

• Following dispensations for continued asbestos use, carpenters at a state construction site took action. Their strike was successful: the use of asbestos-containing material was suspended.



• Nordic Council of Ministers produces a technical report on alternative (to asbestos) materials. The results of testing some alternative materials are shown in table 1.

Table 1. Tests on alternatives materials

	IARC	Technical
Wollastonite	no cancer	breaks (trial)
MMVF	2 B	breaks
Cellulose	not eval.	no problem
PVA	no cancer	no problem
RCF	2A	extreme heat
Flax	not eval.	testing now
Other plants	?	?

- After the ban: State Construction Research Institute publishes book with good pictures of asbestos materials used in buildings.
- Attention is drawn to the importance of easy identification of such materials (product names, uses, photos, database etc.).
- Cancer researchers made a map of Denmark with spots of increased incidence of mesothelioma. Clearly highlighted on the map (by increased incidences) are areas containing: shipyards, asbestos-cement manufacturing, car-brake manufacturing, glass manufacturing.

#### **Current problems**

- The legacy of widespread asbestos use: in the mid 1970s there were more than **3000** product types containing asbestos.
- While asbestosis is decreasing steadily since the ban, there is still a considerable number of lung cancer and mesothelioma cases.
- We can postulate historic phases of production and diseases (Table 2). These phases apply to a range of activities: mining, manufacturing, use, maintenance and demolition.

Table 2. Asbestos Industry Phases and resultant Diseases

Phase	Diseases	
First phase: High dust levels in	Recognition of asbestosis	
manufacturing		
<b>Second phase:</b> Dust/fibre levels are	Recognition of primary lung cancer	
reduced in manufacturing		
<b>Third phase:</b> Low levels in	Discovery of various cancers: Gastro-	
manufacturing.	intestinal, throat, nose, etc. Importantly:	
	mesothelioma	
Fourth Phase ?:	Mesothelioma, lung cancer. Recognition	
"Controlled use", very low levels (as	of prolonged latency periods.	
indoor-climate)		

- Gaining just compensation is still a hard struggle: delays, no hospital reports, settlements based on exposure history not disease prognosis, if a smoker, no separation of compensation.
- It is estimated that delays within the system can result in losses of up to 75% for claimants. Typically, a settlement of \$25000 instead of \$100.000.
- Technical difficulties resulting from the use of alternative materials.
- There are compulsory 4-day training courses in asbestos removal, but no authorisation of the enterprises carrying out such work. The formal reason is that Denmark has still not ratified ILO Convention 162.
- New generations are asking what is asbestos and why is it dangerous?
- A great deal of work concerns the refurbishment of buildings. Both clients and employers are tempted to class asbestos as a "no-problem" detail so as to avoid training courses and proper work conditions.
- Registration of employees working with asbestos no effect after 10 years.
- Dealing with other legislation for example, permission to use asbestos in the filtration of juices.
- There are Implications for different kinds of technical documents: the word "asbestos" appears in 182 legislative documents.
- Implications for standardization. e.g., EU/CEN: "Fibre-cement" with A-deviations; ISO: Asbestos-cement.

#### The future, Nordic

- More cancer and mesothelioma.
- Many products will be encapsulated, but not removed a problem for our children
- "Alternatives for the alternatives."
- High level of information practical guidelines.

#### The future, EU

- Even with out-phasing, problems remain with asbestos removal and existing asbestos.
- A revision of asbestos-directive 91/382/EEC is going on right now.

### Requirements:

- A system of **registering** asbestos in buildings, constructions and materials.
- **Compulsory training courses** for those working in environments known to be contaminated with asbestos.
- Practical guidelines for employees, tenants and others.
- **Approval** from a competent authority for all enterprises engaged in work where contact with asbestos is possible.
- Lowering the **TLV** to 0.1 fibre/cm<sup>3</sup> like the USA.
- A system to ensure proper handling of asbestos-containing waste.
- Updating the **list of approved** asbestos-caused illnesses and full compensation.
- Establishing a publicly accessible **database** containing measurements of asbestos fibre levels in different working conditions.
- Provision of a coherent system for **registration of exposure** to asbestos.
- Minimum and strict requirements for safe work procedures.

## A global future without asbestos

Requirements:

- Export of technologies, training courses etc, minimum work procedures.
- Ratification of ILO 162.
- Watch out for Russian asbestos!
- Technical and political support for bans.
- Pressure on WHO (including concern about asbestos in drinking water systems).
- International trade union campaign.